

Work Order ID 52944-2

Derev 55376 Split

October 23, 2009 8:11:20 AM



Page 1

Item ID: D3943-041

Accept



Setup Start



Revision ID: B

Stop



Item Name: Ground Handling Crank Assembly

Start Date: 10/19/09 Start Qty: 10.00



Cust Item ID:

Required Date: 10/22/09 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3943

B

100

0.00



Purchasing

Purchasing

Memo

Issue P/O:

Purchase Part Number: 143919

Supplier: Princess Auto

Certificate of conformity is required

Description: 4000 lbs lever chain hoist

0.00

CX 09/10/19 (9)

110

Receive & Inspect for Damage & Mat'l Certs

0.00



Packaging

Packaging

Memo

Ensure material certification is attached

0.00

Pg 1/28 (9)



# Work Order ID 52944

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Page 2

Item ID: D3943-041  
 Revision ID: B  
 Item Name: Ground Handling Crank Assembly  
 Start Date: 10/19/09 Start Qty: 10.00  
 Required Date: 10/22/09 Req'd Qty: 10.00  
 Reference:

Accept



Setup Start



Stop



Cust Item ID:  
 Customer:



Approvals: Process Plan: Date: Tooling: Date:  
 QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

0.00

Memo

2> 5 or 10/27



130



Large Fab

Large Fab

Memo

1-Disassemble chain host as per dwg

0.00

0.00

2-Drill handle ass'y (D3943-051) as per dwg

3-Weld D3943-7 stud and D3943-5 plate as per dwg

4-Weld D3954-5 and -9 to supplied chain, discard hooks

A/R Steel Welding Rod Batch: \_\_\_\_\_

N

A

MF 09-10-29

Cpl 09 11 11





# Work Order ID 52944

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Page 3

Item ID: D3943-041

Accept



Setup Start



Revision ID: B

Stop



Item Name: Ground Handling Crank Assembly

Start Date: 10/19/09 Start Qty: 10.00



Cust Item ID:

Required Date: 10/22/09 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

N/A

Memo

0.00

09.11.11

150



QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

0.00

N/A

Memo

0.00

09.11.11



# Work Order ID 52944

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Page 4

Item ID: D3943-041  
 Revision ID: B  
 Item Name: Ground Handling Crank Assembly  
 Start Date: 10/19/09 Start Qty: 10.00  
 Required Date: 10/22/09 Req'd Qty: 10.00  
 Reference:

Accept



Setup Start



Stop



Cust Item ID:  
 Customer:

Approvals: Process Plan: Date: Tooling: Date:  
 QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/  
 Work Center ID

Operation  
 Description

Set Up/  
 Run Hours

Draw  
 Number

Draw  
 Rev.

Plan  
 Code

Accept  
 Qty

Reject  
 Qty

Reject  
 Number

Insp.  
 Stamp

160



Powdercoat

Powder Coating

Fire Red(Ref:4.3.5+10) per QSI005 4.3

0.00

Memo

\*\*\*\*\*mask chain as per dwg\*\*\*\*\*

0.00

~~Powder Coat handle ( D3943-051 ) and chain lug ( D3943-5 ) as per dwg Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3~~

START TIME: \_\_\_\_\_

OVEN TEMPERATURE: \_\_\_\_\_

FINISH TIME: \_\_\_\_\_

*Handwritten:* Powder coat per QSI005 (100% of)  
 Hybrid yellow. See PAR10-001  
 Code HS 112 Y12 N/A B

170



QC

Quality Control

QC3- Inspect Part Finish

GC3

0.00

Memo

0.00

*Handwritten:* 251061/13

*Handwritten:* (17)





# Work Order ID 52944

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Page 5

Item ID: D3943-041  
 Revision ID: B  
 Item Name: Ground Handling Crank Assembly  
 Start Date: 10/19/09 Start Qty: 10.00  
 Required Date: 10/22/09 Req'd Qty: 10.00  
 Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals: Process Plan: Date: Tooling: Date:  
 QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 	Pick Kit	0.00							
Packaging	Memo	0.00							
Packaging									
190 		0.00							
Large Fab	Memo	0.00							
Large Fab	1-Assemble as per dwg								
	2-Calibrate as per dwg								
	QC5- Inspect part completeness to step on W/O	0.00							
200 	QC	0.00							
Quality Control									

*EL 10/01/12*

*EL 10/1-12 (x9)*  
*PTO* →

*(+7)*

*EL 10/01/12*

*copy to*

CALIBRATION	
ID	D3943-041
BY	DATE 10/21/13
DUE	11/01/13

*QC Inspector to witness*  
*3 touch up from testing - 10/01/14*  
*27 5/10/14*  
*Apply A recd calibration tag on the*



W/O: 52944

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-01-13		Add 30365T35 swivel eye B 112878 <del>12</del> +1 B 112995 x7 B 112967 +1 B4 _____	EL	10-1-13	(9)		S relating

Part No: D3943-041 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries



**Work Order ID 52944**

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Item ID: D3943-041

Accept



Setup Start



Revision ID: B

Stop



Item Name: Ground Handling Crank Assembly

Start Date: 10/19/09 Start Qty: 10.00



Cust Item ID:

Required Date: 10/22/09 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

210

Identify as per dwg &amp; Stock Location:

0.00



Packaging

Memo

PDP  
712-683-011 0.00

Packaging

PC 10/21/12 (7)

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/21/14  
MF 10-1-14





# Picklist Print

October 19, 2009 11:16:55 AM

Page 1

Work Order ID: 52944

Parent Item: D3943-041RevA

Parent Item Name: Ground Handling Crank Assembly

Comments:

Start Date: 10/19/09

Required Date: 10/22/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2690-4		Manufactured	No			180	Each	9.0000	10.0000			
---------	--	--------------	----	--	--	-----	------	--------	---------	--	--	--



LAN YARD

*Handwritten:*  
 CBL 460 x 2 M111342 → (18)  
 CBL 1240 x 1 - cable -  
 M107234 x 68" inf.

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

48534

9

9

8143919

Purchased

No

110

Each

0.0000

10.0000



Lever Chain Hoist

MS21042-4

Purchased

No

170

Each

113.0000

10.0000



USE MS21042L4

MS21042L5

*Handwritten:*  
 MF  
 09-10-29

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

100743

5389

5461

6844

113

9

82

3

19

*Handwritten:*  
 M111636 → (9)

52944 MF 09-10-29



# Picklist Print

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Page 2

Work Order ID: 52944

Parent Item: D3943-041RevA

Parent Item Name: Ground Handling Crank Assembly



Comments:

Start Date: 10/19/09

Required Date: 10/22/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3943-3RevA		Manufactured	No			180	Each	3.0000	10.0000			
												
Handle Extension												

EL 10-1-12

B52978

→ ⑨

D3954-7RevA



Ratchet Lug

Manufactured No

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	3	
		3	
	52094		

180 Each 6.0000 10.0000



Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	6	
		6	
	52099		

180 Each 182.0000 10.0000



Pl 10/01/12

B52996

→ ⑤

④

AN960-46



Washer

Purchased No

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	182	
		149	
	111808		
	19356		
	5519		

7  
26

M110098 → ⑨

Pl 10/01/12

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Shop Packet Print

Page 2





# Picklist Print

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Page 3

Work Order ID: 52944

Parent Item: D3943-041RevA

Parent Item Name: Ground Handling Crank Assembly



Comments:

Start Date: 10/19/09

Required Date: 10/22/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
S1475  inventory		Purchased	No			180	Each	3.0000	10.0000			

ANS-12A inf.

AN4-10A



Bolt

Purchased No

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	3	
	17303	3	

11 3079 x 9. inf 10-1-14

180 Each 113.0000 10.0000



M110467 → (9)  
lpl 10/01/12

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	113	
	103962	8	
	108986	13	
	111425	92	

D3585-1RevA



Set Screw

Manufactured No

180 Each 20.0000 10.0000



Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	20	
	31571	20	

lpl 10/01/12

(9)

October 19, 2009 11:16:55 AM

Shop Packet Print

Page 3



# Picklist Print

October 19, 2009 11:16:55 AM

Page 4

Work Order ID: 52944

Parent Item: D3943-041RevA

Parent Item Name: Ground Handling Crank Assembly

Comments:

Start Date: 10/19/09

Required Date: 10/22/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3949-041RevA		Manufactured	No			180	Each	48.0000	10.0000			
Remove before Flight Flag Assembly												

*Pl 10/01/12*

HX-15		Purchased	No			180	Each	396.0000	30.0000			
1/4-20 UNCx3/4 S.H.C.S.												

*9*

*1*  
*1*

*HX-16*  
*1/4-20 UNC x 1" S.H.C.S.*

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	48	
		48280	

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	396	
	110684	196	
	110759	200	

*Pl 10/01/12*

D3943-051RevA		Manufactured	No			180	Each	1.0000	10.0000			
Handle Assembly												

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	1	
		52714	

*EL 10-1-12*

*B53225 x 9*

October 19, 2009 11:16:55 AM

Shop Packet Print

Page 4



# Picklist Print

October 19, 2009 11:16:56 AM

Page 5

Work Order ID: 52944

Parent Item: D3943-041RevA

Parent Item Name: Ground Handling Crank Assembly

Comments:

Start Date: 10/19/09

Required Date: 10/22/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3943-053RevA		Manufactured	No			180	Each	1.0000	10.0000			



Chain Assembly

B53226

x9

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

52713

1

1

180

Each

19.0000

10.0000

3408A59

Purchased

No



BALL PLUNGER

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

111948

19

19

EL

10-1-12

⑨

10/01/12

October 19, 2009 11:16:56 AM

Shop Packet Print

Page 5





ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
11		1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
12	1			D3943-3	HANDLE EXTENSION	
13		1		D3943-5	PLATE	
14		2		D3943-7	STUD	
15			1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24			1	D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26			1	D3954-9	GWT CHAIN PIN	
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
41	1			S-1475	SPRING	REID SUPPLY
42	1			3408A59	BALL PLUNGER	McMASTER CARR
43	3			HX-15	SOCKET HEAD CAP SCREW 1/4-20 UNC X 1.0 LG	HASKINS

#52944

DEO ATTACHED

RELEASED  
2009-10-19

B	SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS	DRAWING NO.	REV. B
CHECKED		D3943	SHEET 1 OF 5
MFG APPR.		TITLE	SCALE
DE APPR.	N/A	GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	09.10.15	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

REMOVE AND RETAIN  
RUBBER HAND GRIP

RE-INSTALL  
RUBBER HAND-GRIP  
HERE

D3943-3  
HANDLE EXTENSION

AN5-11A BOLT  
AN960-515 WASHER  
MS21042L5 NUT

D2690-4 LANYARD

D3949-041 FLAG

#52944

3408A59  
BALL PLUNGER

HX-15 S/H CAP SCREW

HX-15 S/H CAP SCREW  
S-1475 SPRING

8143919  
LEVER CHAIN HOIST

D3585-1 SET SCREW

DISCARD PIN

RETAIN PIN

REMOVE &  
DISCARD HOOK

RE-INSTALL PIN

D3943-7 RATCHET LUG

D3943-053 CHAIN ASSY

8143919 LEVER CHAIN HOIST  
(SHOWN PRIOR TO MODIFICATION)  
(CHAIN SHOWN SHORTENED FOR CLARITY)

(CHAIN NOT SHOWN FOR CLARITY)

(CHAIN SHOWN SHORTENED FOR CLARITY)

# D3943-041 GROUND HANDLING CRANK ASSEMBLY

DEO ATTACHED

## NOTES -041:

- 1) MATERIAL: N/A
- 2) FINISH: DISASSEMBLE LEVER CHAIN HOIST (ITEM 39) AND  
SPRAY PAINT YELLOW WITH BERTRANDS CO 10318 PER DART QSI 005-42
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3943-041" USING FINE POINT PERMANENT INK MARKER

*powder coat hybrid yellow  
see PAK 10-00  
10-01-07*

RELEASED  
2009-10-19

DESIGN	DSTOW / AUS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	ABS	DRAWING NO.	REV. B
CHECKED		D3943	SHEET 2 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.		COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT DART AEROSPACE LTD'S WRITTEN PERMISSION	
DATE	09.10.15		



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

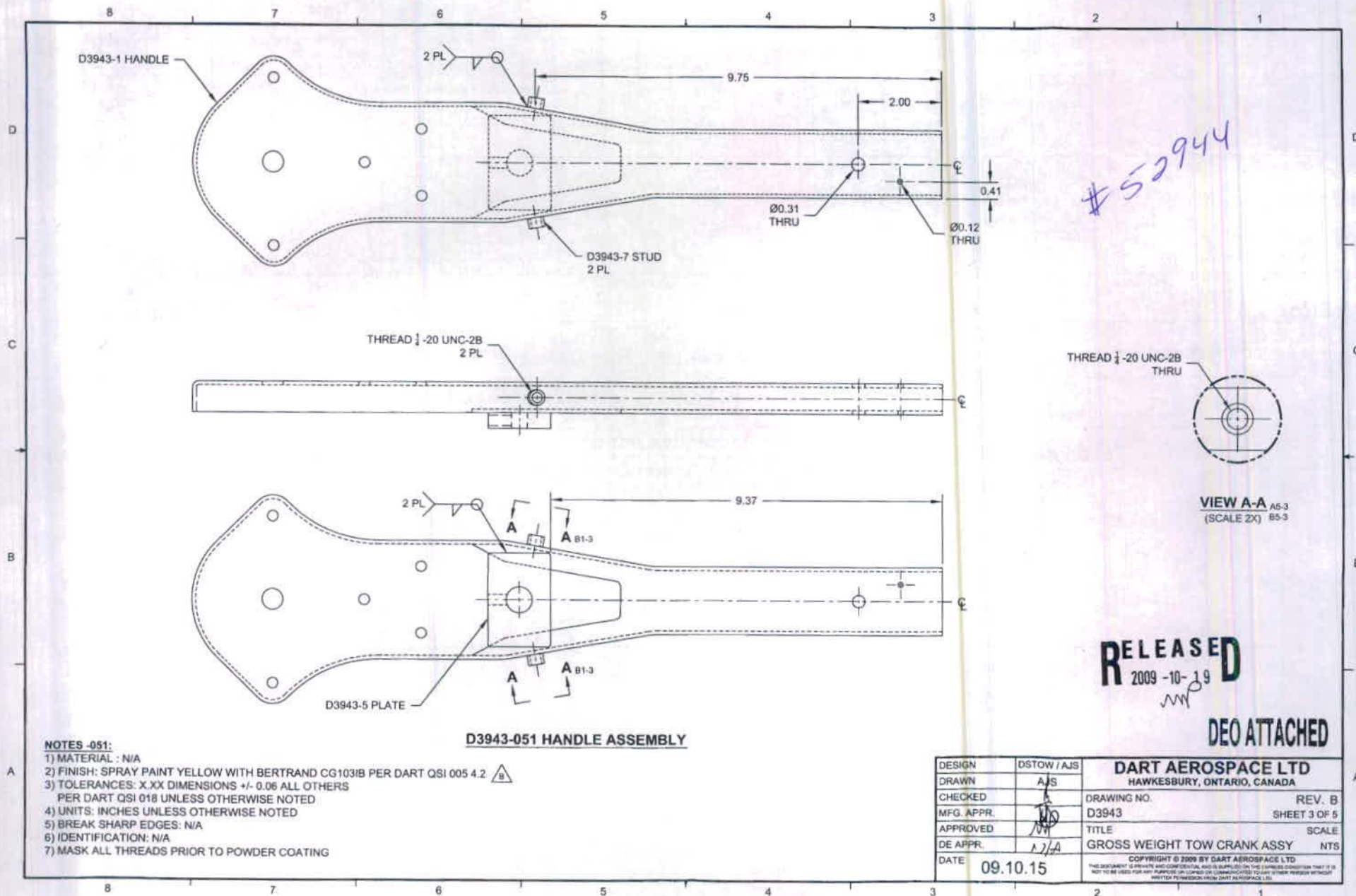
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

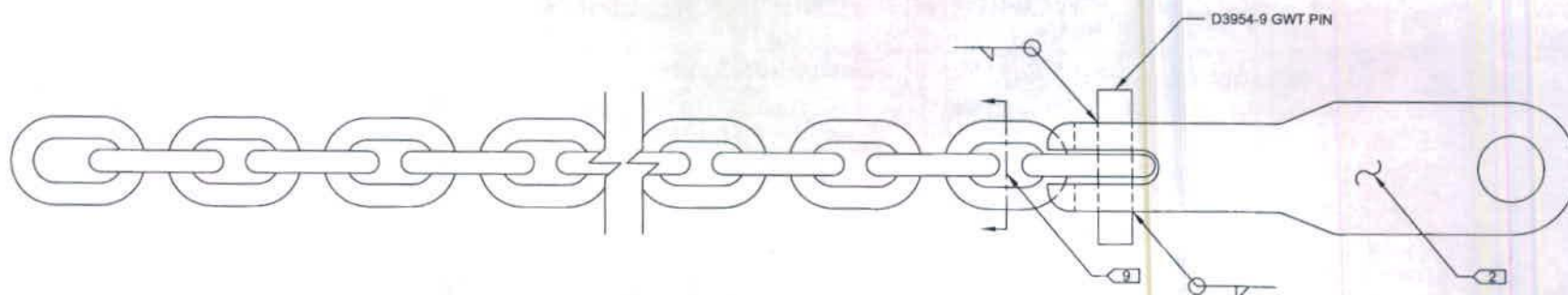
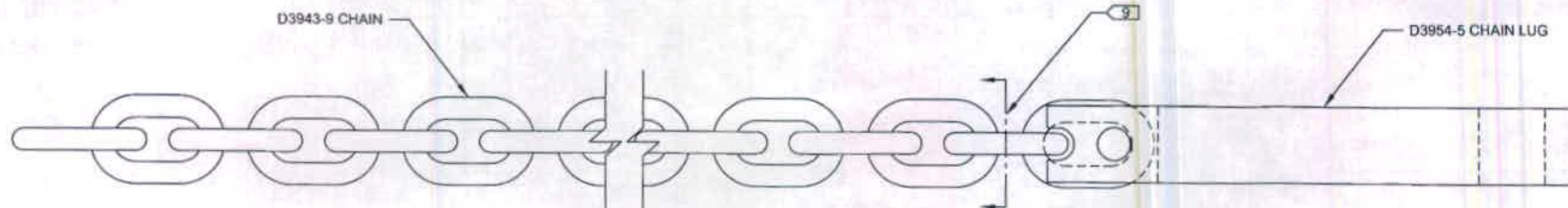
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

B 7 6 5 4 3 2 1

# 52944



**D3943-053 CHAIN ASSEMBLY**

DEO ATTACHED  
RELEASED  
2009-10-18  
MP

**NOTES -053:**

- 1) MATERIAL: N/A
- 2) FINISH: SPRAY PAINT YELLOW WITH BERTRAND CG1031B PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) WELD PER QSI 004
- 9) MASK CHAIN FROM THIS POINT ON PRIOR TO POWDER COATING

DESIGN	DSTOW / AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3943	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	09.10.15	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

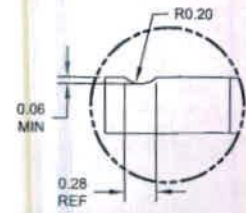
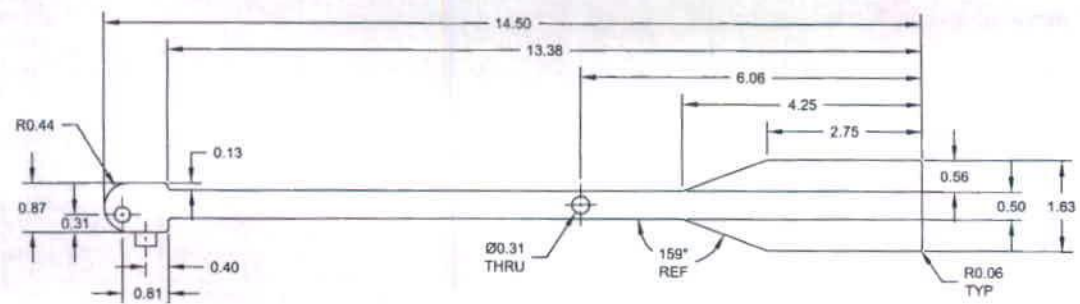
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

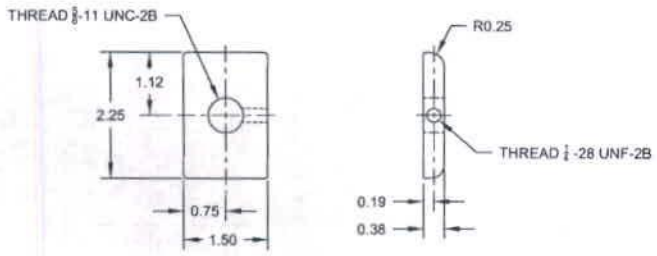
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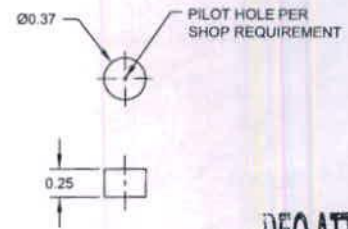
#52944



D3943-3 HANDLE EXTENSION



D3943-5 PLATE



D3943-7 STUD (SCALE 2X)

NOTES -11/-13:

- 1) MATERIAL -3 & -5: MILD STEEL, SHEET  
AISI 1010-1025 OR ASTM A36/A366/A1008  
OR CSA G40-21, 38W/44W/50W/60W/70W  
REF DART SPEC M1010-S
- OR : MILD STEEL, BAR  
AISI 1010-1025 OR ASTM A36/A366/A569/A570  
OR CSA G40-21, 38W/44W/50W/60W/70W  
REF DART SPEC M1010-B
- 7: MILD STEEL, ROUND BAR  
AISI 1018-1025  
PER MIL-S-7097  
REF DART SPEC M1018-R

- 2) FINISH -3: SPRAY PAINT YELLOW WITH BERTRAND CG103IB PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A

DEO ATTACHED

RELEASED  
2009-10-19

DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS	DRAWING NO.	REV. B
CHECKED		D3943	SHEET 5 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.		COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	09.10.15		

8 7 6 5 4 3 2 1



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

DRAWING NO. D3943	TITLE GROSS WEIGHT TOW CRANK ASSY	REV. B	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3943-B-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED	MFG. APPR.	APPROVED	DE APPR.	N/A		
DATE 09.10.30	DATE 09.10.30	DATE 08/11/04	DATE 09/10/30	DATE			

SHEET 1 PARTS LIST MODIFY ITEM 43 AS SHOWN:

# 52944

IS:

43	3			HX-16	SOCKET HEAD CAP SCREW 1/4-20 UNC X 1.0 LG	HASKINS
----	---	--	--	-------	---	---------

WAS:

43	3			HX-15	SOCKET HEAD CAP SCREW 1/4-20 UNC X 1.0 LG	HASKINS
----	---	--	--	-------	---	---------

**RELEASED**  
2009-11-18

REASON: DRAFTING ERROR

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

# PURCHASE ORDER

Purchase Order ID PO10594

Purchase Order Date 10/19/09

PO Print Date 10/19/09

Page Number 1 of 1

Order From :

VC-PR1001

PRINCESS AUTO LTD.  
P.O. BOX 1005  
WINNIPEG, MB R3C 2W7  
CA

**FAXED**  
2-11-09

Contact Name  
Vendor Phone 613 247 1651  
Vendor Fax 613 247 1657  
Vendor Account Nbr

Buyer Linda Lacelle  
Requisition Nbr  
Tax Resale Nbr 10127-2607  
Terms Net 30  
Currency CAD  
FOB

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	
1	8143919	Lever Chain Hoist	10/21/09 Yes	10.00 Each	Purolator ground	\$159.0000	

Special Inst: please ship purolator collect acct#7684382

PO Total:

Change Nbr: 1

Change Date: 10/19/09

No substitution or deviation with  
consent.  
Certificate of Conformity or Mat  
Certification required when appl

100



# Princess Auto Ltd.

Ottawa  
1111 Ages Drive  
Ottawa, ON K1G6L3

Date 26/10/2009 Time 2:38 PM

Reg	Session	Cashier	Trans	Store
8	7694	6096	1005865	16

SOLD TO: 073126 TEAM MEMBER: ASHLEY L. 6096  
DART AEROSPACE EX

PO #10594

Item	Qty	Price	Amount
B 8143919	9	159.99	1,439.91
HOIST CHAIN 2 TON LEVER			

\*Send To:

DART AEROSPACE EX  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A1K7  
(613) 632-5200

PC# 10594

Subtotal	1,439.91
GST 5.0% R104304738	72.00
PST 8.0%	115.19
<b>Total</b>	<b>1,627.10</b>

A/R Account (1,627.10)  
073126

Item Count: 9

D 07/10/09

## CUSTOMER COPY

Thank you for shopping at PRINCESS AUTO!  
Building on our rich retail traditions, we  
will continue to grow a successful, caring  
and innovative company, inspired by Royal  
Service... Getting better everyday.



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